VALUE ADDED ACTIVITIES AND AGRIBUSINESS

Executive Summary

The added value industries in Afghanistan are essentially private sector driven. However, the Ministry of Agriculture, Animal Husbandry, and Food (MAAHF) has a role in convincing farmers what crops and crop varieties should be grown based on significant market opportunities, establishing a market information system that provides farmers, associations, and processors with timely price and volume information, forming regional and national farmer and agribusiness associations that give these groups greater power in advocating for policy reforms and accessing markets, and establishing an enabling environment for the private sector to invest and operate within. The MAAHF and the Ministry of Commerce should play a role in assisting farmer associations and agribusinesses prepare business plans for accessing credit and should provide, with donor assistance, investment grants to qualifying investors. In addition, the MAAHF should assist investors in accessing government land, such as land set aside as industrial parks. The MAAHF and the Ministry of Commerce should assist agribusinesses in reaching international markets through trade missions, market research, and international fairs.

It is clear from the small number of added value enterprises that have been supported or surveyed that substantial grants are needed to entice investors. Firstly, the infrastructure is poor and there is a lack of experienced managers. These add to the start up costs of any enterprise. Secondly, there is a general element of risk in setting up businesses in Afghanistan, where reliance is placed on uncertain sources of raw materials and other factors of production. These various problems justify the provision of grants to entrepreneurs to assist them to invest in areas of business where they might not otherwise take the risk. In order to assist the private sector in their investment decisions, and to inform the government and donors which areas of businesses should be supported, a range of feasibility studies are proposed. These feasibility studies will complement those studies that have already been carried out, some of which have already led to investment by entrepreneurs and grant support from donors. Availability of credit for working capital is a separate issue, covered elsewhere in the Master Plan document.

The total estimated budget requirements for the five-year Master Plan for Value Added Activities and Agribusiness is $149.74 to $188.34 million, of which $34.4 million would be for funding (by donors) the feasibility studies and the Ministry of Agriculture, Animal Husbandry, and Food. The remaining investment in expanded value added activities would be funded primarily by donor grant funds (approximately 25%), investor cash (25%), and through credit (50%).

INTRODUCTION

In this chapter, all added value activities are categorized separately or on a combined basis as involving primary processing, secondary processing, and tertiary processing. Primary processing is represented by cleaning, sorting, grading, washing, drying, shelling, storage, slaughterhouse operations, etc., many of which can be done in a village setting without a great deal of machinery and equipment. Secondary processing is represented by milling, ginning, dairy processing, juicing, tanning, etc., all of which requires machinery and/or equipment specifically suited for the product. Tertiary processing is represented by baking, other types of food manufacturing and mixing, leather-making, textiles, etc., all of which require specialized machinery and equipment to manufacture the desired product. All of the value added activities are categorized by the product's intended destination, that is, for export markets, domestic markets, or both. Many of the added value activities detailed in this report also rely on substantial improvements in the underlying productivity of agriculture, which depend on a wide range of factors covered in other sections of the Agriculture Master Plan.

Current Situation of Value Added Activities and Agribusiness in Afghanistan

Many products do not reach the final consumer in the raw form, and need some kind of processing or manufacture before reaching the consumer. This processing or manufacture generally needs some investment in facilities and equipment and a whole range of new skills and managerial ability in order to manage the process or manufacture. In the modern economy, there is generally more value added in the processing, manufacture and marketing parts of the business chain than in the raw material production at the farmers' level.

Many of these processing activities aim to preserve the quality and nutritional value of the food produced by the farmer. Other areas related to food quality are covered in the Master Plan under Food Security and Human Nutrition.

The development of export markets for horticultural produce is generally addressed in the Master Plan under the subject of Horticulture. However, some important aspects of the horticultural industry are addressed under this added value topic.

Other parts of the Master Plan deal with the basic productive ability of the farmers and various related aspects of agriculture. The costs and returns on a wide range crops have been prepared by RAMP. While often these crops form the raw materials or a starting point for the added values enterprises, these costs and returns are not included in this section.

Current Value Added Activities

Various projects and investments in added value agricultural activities have been made and a large range of other potential areas for investment have been identified but most of them need studies to determine whether the investment is economically feasible. The various sub-sectors in which value-added activities and agribusinesses have been invested in include:

Added Value Activity	Level of Development	Geographical Location	Value of Current Investments US$	Market (export, domestic, or both)	Total Volume of Sales (per annum)	Total Added Value US$
PRIMARY PROCESSING						
Product Cleaning	Seed cleaning, treatment, and sales (29 Village Based Seed Enterprises); cumin cleaning	Nangarhar, Parwan, Helmand, Ghazni, Kunduz, Takhar, Baghlan; Herat	3 million; 200,000	Domestic seed sales; cumin for export	3000 metric tons (wheat, rice, mung bean,onion); cumin (100 metric tons)	600,000; 200,000
Grain warehousing	Seven 200 sq meter (500 mt capacity) warehouses for storing grain, legumes, etc.	Kunduz,	350,000	Domestic sales	5,250 mt	300,000
Grain silo storage (government owned)	6 with a total capacity of 210,000 mt (bulk)	Herat, Kandahar, Mazar, Puli-i-Khumri, Kabul	10 million	Domestic sales	N/A	N/A
Potato storage	30 storage units (10 mt) built by ICARDA, 10 storage units (25 mt) built	Bamyan, Baghlan, Ghazni, Nangarhar	100,000	Domestic	550 mt	50,000
Dried fruit (raisins, apricots) processing, packing	25 raisin processors operating	Kabul, Kandahar, Mazar, Herat	4 million	Russia, Ukraine, Czech Republic,	5,655 mt	3.41 million
Dried vegetables	Dried vegetable plant	Charikar (Parwan)	3.8 million	UK	10 mt	30,000
- Fresh fruit cold storage, processing, and packing	2 plants constructed and operating	Kandahar, Kabul	0.5 million	India, Kuwait, Saudi Arabia, Dubai	100 mt	200,000
Nut Processing and packing	3 plants and processing lines (each 600 mt capacity/year single shift) under construction	Kandahar, Mazar, and Kabul	0.75 million	Worldwide		

SECONDARY PROCESSING						
Grain milling	4 mills with a total milling capacity of 700 mt/day (double shift)	Kunduz, Kabul, Herat, Mazar	10 million	Domestic	350 mt/day	4.4 million
Cotton ginning	4 large gins and over 50 small private gins	Private–Herat (large), Herat, Kunduz, Takhar, Mazar, and Baghlan and Helmand small; Government-(large) Kunduz, Helmand, Mazar,	10 million	Export (by open tender)	6,000 mt	2.6 million
Oilseed processing	11 sesame/flax very old processing plants; 4 cottonseed processing plants	Kunduz (old); At the site of the 4 large gins (cottonseed processing)	422,000	Domestic	4000 kg (from old processing plants); no processing from large gins	3020
Tomato processing	Tomato processing plant	Karokh District, Herat	86,000	Domestic		
Juicing, preserves, jams, pickles	1 plant	Kabul	0.1 million	Domestic	~1250 kg	10000
Dairy processing	3 dairy plants (FAO assisting in the operation); one private processing plant in Kabul	Kabul, Kunduz, Mazar	800,000	Domestic	Averaging total of 700 kg over last 4 years	284,000
Potato chip processing	Nasseb	Kabul	?	?	?	?
Sugar production from sugar beet	Baghlan Sugar Factory	Pul-i-Khumri	12,000,000	Domestic	10,000 mt	1 million
Olive and olive oil processing	Processing plant	Nangarhar	400000	Domestic	5000 kg	10000
TERTIARY PROCESSING						
Naseeb Bakery	Bread Factory	Kabul	?	Domestic	220 mt	101,200
Textiles	7 textile manufacturing plants (government)	Herat, Mazar, Kabul,	2 million	Domestic		

Those sub-sectors where feasibility studies are needed before investment can be promoted include:

Primary Processing

- Slaughterhouse
- Saffron
- Medicinal Plant processing

Secondary Processing

- Various aspects of sheep flock and cattle herd development (business chain)
- Meat processing
- Oilseed processing
- Cotton ginning
- Cashmere
- Tanning and curing of hides
- Fruit and vegetable juicing, concentrate
- Herbs, spices, essential oils

Tertiary Processing

- Leather manufacturing, various
- Packaging Materials Factory
- Textile manufacturing
- Food manufacturing
    - Raisin paste
    - Blanched almonds
    - Snack foods
    - Starch manufacturing

In these sub-sectors there may be more than one business proposition and a total of 30 feasibility studies are proposed to be carried out over the next two years. The projected 30 feasibility studies are expected to cost an average of $80,000, to make a total cost of $2.4 million.

STRATEGY FOR EXPANDING VALUE ADDED ACTIVITIES

Building on already existing value added activities and extending investment in economically feasible, value added activities forms the basis for the strategy going forward. For each activity, a planned level of development, geographical location, investment value, market destination, and annual volume of sales is projected. Each of the activities given below is then briefly described in narrative following the table.

Added Value Activity	***Planned Level of Development***	***Geographical location***	***Value of Planned Investment***	***Market (export, domestic, or both)***	***Total Planned Volume of Annual Sales***
			US$		
PRIMARY PROCESSING					
Quality seed supply, seed cleaning, testing, treating, promotion, and sales	*Develop regional seed companies with suitable seed production systems*	*Nationwide*	*5.1 million*	*Domestic seed sales*	*10,800 metric tons vegetable seed, seed potato, wheat, rice, others)*
Agricultural commodity warehousing through warehouse receipt financing	*As part of the warehouse receipt system – 66 warehouses with 1000 metric tons capacity*	*Initially, Herat, Kunduz, Baghlan, Balkh,and Helmand then nationwide*	*3.3 million*	*Domestic*	*Storage 66,000 mt*
Grain silo storage (privatized)	*6 with a total capacity of 210,000 mt (bulk)*	*Herat, Kandahar, Mazar, Pul-i-Khumri, Kabul*	*10 million*	*Domestic sales*	*168,000 mt*
On-farm shade drying of raisins	*500 sheds for green raisins*	*Shamali Plains, Kandahar*	*750,000*	*Export/domestic*	*3750*
Potato storage	*100 storages*	*Bamyan, Ghazni, Nangarhar, Central provinces,*	*400,000*	*Domestic*	*2,500 mt*
Dried fruit (raisins, apricots) processing, packing	*Upgrade 8 raisin processors (@6250 mt cap)*	*Kabul, Kandahar, Mazar, Herat, other cities*	*5.7 million*	*Worldwide*	*50,000 mt*
Dried vegetables	*Three dried vegetable plants*	*Jalalabad, Herat, Helmand*	*6 million*	*Europe and US*	*1200 mt*
Fresh fruit cold storage, processing, and packing	*10 cold storage, processing and packaging plants*	*Kunduz, Herat, Mazar, Parwan, Kabul, Helmand, Jalalabad, Zabul*	*5 million*	*Middle East, Far East, Southeast Asia, Russia*	*5,000 mt*
Marketing centers with cold stores and refrigerated transport (grapes)	*Range: From (a)600 sq m buildings including 200 cold rooms (25-mt capacity), 50 cold rooms(150 mt cap), 100 refrigerated containers, To (b) Buildings including 252 cold rooms @ 210 mt cap, precoolers*	*District and provincial centers located in grape growing areas*	*From (a) 11 million to 42.6 million*	*Worldwide*	*(a)12500 mt capacity (b)52,920 mt capacity*

Marketing centers as part of association development for fruits and nuts	*250 Collection Centers including 500 cold rooms (25-mt capacity), 34 DistributionCenters including 136 cold rooms (25 mt capacity) and 238 used reefers*	*250 Districts and 34 provincial wholesale markets (nationwide)*	*43 million*	*Worldwide*	*15900 mt capacity*
Nut Processing and packaging	*Range: From* *(a) Buildings with 10 almond plants and processing lines (each 600 mt capacity/year single shift);* *To* *(b) Buildings with 44 almond processing plants @386 mt cap, 4 pistachio processing plants @518 mt cap*	*Kandahar, Mazar, Kabul, Badakhshan, and other nut growing areas*	*(a) 2 million* *(b) 9 million*	*Worldwide*	*(a)6000 mt* *(b) 19000 mt*
Silk	*Rehabilitate silk production facilities, buy thousands of egg cartons for producers*	*Kabul - MAAHF facility rehabilitation; Mazar – expand facilities; Herat*	*1 million*	*Worldwide*	*?*
Wooden crates	*50 crate and other carpentry shops*	*Production areas*	*500,000*	*Domestic*	*?*
SECONDARY PROCESSING					
Grain milling	*4 mills with a total milling capacity of 800 mt/day (double shift)*	*Kabul (2), Phul-i-Khumri, Jalalabad*	*8 million*	*Domestic*	*3,200 mt/day*
Tomato processing	*Tomato sauce processing plants (2)*	*Helmand, Kunduz*	*300,000*	*Domestic*	*1400 mt*
Dairy processing	*Processing plant producing 85% bulk milk, 5% packaged milk, and 10% other dairy products*	*Phul-i-Khumri*	*8 million (6 million from investors, 2 million grant)*	*Domestic*	*1205 mt*
Jam, preserves, chutney, pickled vegetables	*Two production facilities (pilot)*	*Kabul, Helmand*	*200,000*	*Domestic*	*200 mt*
Juicing	*One plant (for apple juicing) already planned for in the horticultural chapter of Master Plan*	*Kabul*	*200,000*	*Domestic*	*2.87 million liters*
TERTIARY PROCESSING					
Biscuit factory	*Factory produces soft or hard biscuits*	*Kabul*	*350,000*	*Domestic*	*1200 mt@250 kg/iour*
Pasta Factory	*Factory produces 4 mt/day of pasta*	*Kabul*	*1.54 million*	*Domestic*	*1120 mt*
Total		***Range: from 115.34 million to 153.94 million***			

PRIMARY PROCESSING

Quality seed supply – Though village-based seed enterprises (VBSEs) have been supplying good quality, improved seed to farmers, these private enterprises need to expand their seed types into new, more profitable areas. Because the VBSEs are lead by farmers with little access to modern seed technologies and market opportunities, the seed enterprises need to be better organized and managed into regional seed companies or associations that can lead the seed industry into profitable diversified seed business. The expansion of production and sales of over 10,000 mt of many seed types would provide farmers with a dependable, diversified supply of high-valued seed.

Agricultural commodity warehousing through warehouse receipt financing – Warehouse receipt financing is the use of securely stored goods as loan collateral. These programs allow producers to deposit a finished good or agricultural product in a secure warehouse where the producer receives a receipt certifying the deposit of goods of a particular quantity, quality, and grade. The farmer can use the receipt as a form of portable collateral to request a loan from a financial institution. Few public warehouses are available for agricultural commodity storage. The Ministry of Commerce has 134 poorly maintained warehouses (50% in Kabul and 50% in the provinces, all operated by the General Food Department). To augment the supply of qualified, public warehouses, the Ministry of Commerce will need to rehabilitate these warehouses to protect agricultural commodities from exposure to moisture, poor ventilation, insects and rodents. In addition, it is recommended that 66,000 mt of storage capacity be constructed for the warehouse receipts system in district and provincial centers in major commodity (especially wheat) growing areas. These warehouses would be constructed by private investors who would be able to receive loans from banks based on a feasible business plan.

Grain silo storage – To provide bulk storage opportunities for cereal grains, the six silo complexes will be privatized (preferred) or leased to private organizations. As strict grades and standards become institutionalized within the marketing system, bulk storage will be more cost effective and efficient than bagged storage.

On-farm shade drying of raisins – The export market for good quality green raisins is significant. New technologies in shade drying raisins have been introduced in the Shamali Plains and in Kandahar. Farmers are investing in these drying sheds and over 500 of these sheds are expected to be installed.

Potato storage – Off-season potato production and storage have caught the interest of many farmers. The virus-free, seed potatoes are especially valuable when stored until the time of planting. An additional 100 storages in cool areas invested in by farmers, especially those producing seed potatoes, will provide the country with a valuable, timely seed supply.

Dried fruit processing and packaging – The upgrading of 8 raisin processing plants will result in supplying 50,000 mt of quality dried fruit to new and expanded export markets.

Dried vegetable plants – With a growing export market demand for dried vegetables, three additional dried vegetable plants will be installed with private investment.

Fresh fruit cold storage, processing, and packing – New and expanded export markets for fresh fruit have been identified and supplied. Only through the development of private processing/packaging centers in key production areas and privately-invested cold chains linking production areas to export facilities can the export potential be realized. Ten cold storage, processing, and packaging plants are planned.

Marketing centers with cold stores and refrigerated transport (grapes) – A range of investment is included: **On the low side**, investment in cold storage is expected to expand rapidly after more Afghans observe the added value that is achieved when preserving the quality of fruits through cold storage. At first, investors will invest in mostly small-scale cold storage units (25 mt capacity), 200 of them over 5 years. Once they get some expertise and experience in operating the cold rooms profitably, it is expected that investors will invest in larger cold rooms (150 mt capacity), 50 of them along with 100 refrigerated containers for transporting the fruit**. On the high side**, investment in cold storage includes 252 cold rooms and precoolers with a capacity of 210 mt each. A decision on the level of investment needs to be made.

Marketing centers as part of association development for fruits and nuts – To stimulate the development of associations linked to viable processing and marketing activities, 250 collection centers and 34 processing centers are to be invested in, with donor assistance. The centers are to be facilitated with cold chains so that associations can sell good quality products in wholesale markets.

Nut processing and packaging – With the increased demand for Afghan nuts, nut processors and exporters have started investing in sorting and packaging equipment and machinery. With the current technical assistance and improved processing lines being installed and operated, it is expected that, **on the low side**, an additional 10 processing and packaging lines will be invested in by the private sector in the major nut growing and processing areas of Afghanistan. **On the high side**, 44 almond processing plants and 4 pistachio processing plants will be invested in.

Silk – Silkworm production has been stimulated by some investment and supplying of egg boxes to interested producers. As the silk industry remains a cottage industry here in Afghanistan, a modest investment in upgrading the facilities for silkworm production will have a significant impact on the quantity produced by rural women.

Wooden crates – Relatively sturdy crates are needed for transporting fresh fruits to domestic markets. Pakistan is a big supplier of such crates to Afghanistan. If crates are made near the tree (mostly poplar) production areas in Afghanistan, the crates can be economically built and substituted for the Pakistan-built crates. It is also possible that farmers could invest in such crate production plants and capture some of the value added.

SECONDARY PROCESSING

Grain milling – The new flour mill in Kunduz that was assisted with technical assistance and training from the USAID-funded RAMP Program has been operating efficiently and cost effectively at a throughput of 100 mt/day. The mill has provided a market outlet for wheat producers from the four-province area. Many wheat producers have stored more of their wheat and brought their wheat directly to the mill. As a result, wholesale wheat prices started out at a reasonable level and steadily increased over time in Kunduz. Because the impact of the mill is outstanding, investors are expected to invest in an additional four mills in strategic production areas. The demand for "atta" and refined flour is growing and is expected to outstrip the supply of Afghan –produced wheat products.

Tomato processing – Production of tomato sauce and paste in Afghanistan is economically feasible under certain conditions. Those conditions include: in concentrated tomato production areas where collection is relatively convenient and inexpensive to transport to the processing plant, and where good quality tomatoes can be cold stored and marketed in large volumes in nearby markets while the poorer quality tomatoes are kept for processing, the economic feasibility is positive. Two areas of Afghanistan where tomato processing is most likely feasible is Kunduz and Helmand. In Kunduz, electric power is relatively cheap and available 24-hours thus making processing cheaper than in other cities where power is intermittent. In Helmand, fresh tomatoes are difficult to transport to other cities without significant losses. The growing season is relatively long compared to other areas of Afghanistan. Tomato paste from small-scale processing of tomatoes in Helmand could substitute for imports from Iran.

Dairy processing – With exception of the FAO dairy operations in Mazar, Kunduz, and Kabul and a small-scale, private operator in Kabul, there are no sizable milk processors using technologies that could compete with the rapidly increasing imports of powdered milk and other dairy products into Afghanistan. Private investors assisted by Land 'o' Lakes have planned to build a large dairy processing plant in Bagram. The feasibility of the plant shows it is economically feasible when producing at 1200 mt of milk and milk products per year. There are more investors interested in investing in dairy processing, however, many may be waiting for the profitability of such a business venture to become clearer.

Jam, preserves, chutney, and pickled vegetables – A business model based on a pilot plant with manually-operated cooking, filling, and sealing machines was prepared by CNFA.

The planned facility has a capacity of 480 metric tons per year (that is, 540,000 jars of apricot jam and 360,000 jars of tomato-based chutney). However, each plant is only expected to produce 100 metric tons per year for the first few years. Small-scale production of these products are targeted for women's (and widows') groups in Helmand and Kabul. Producing vinegar from various agricultural products and/or pickled vegetables showed marginal feasibility.

Juicing – A Juice Business Enterprise model developed by CNFA showed the enterprise to be profitable (with a return on investment of over 50%). An apple juicing plant is planned for installation in Kabul. Market trends indicate a 15% annual growth in the total consumption of fruit juices by Afghans. The operating results from this juicing plant may provide the incentive for others to invest in juicing.

TERTIARY PROCESSING

Biscuit factory – An automated biscuit factory in Kabul is planned. The biscuit factory, operating at 250 kg/hour, would produce wrapped soft or hard biscuits. Bakery owners have indicated that biscuits have a rapidly growing market in Afghanistan. Income and cash flow projections on the factory show a profitable first year and a two-year payback period.

Pasta factory - A new pasta factory producing 4 mt/day to be supplied to the Kabul market estimated to consume 3000 mt per year. Based on a feasibility completed by the Italian Cooperation, the factory would be fully equipped to sift, extrude, dry, process, and package the product. The profit margin would be approximately $86/mt (an annual return on investment of 6.3%).

In summary, these activities represent a total ranging from $115.34 to $153.94 million of investment for expanded value added activities. For all the activities except the *"marketing centers as part of association development for fruits and nuts"*, the total investment includes 25% grant funds, 50% credit, and 25% investors' own capital. The activity entitled *"marketing centers as part of association development for fruit and nuts"* is primarily funded (90%) through donor funding. The privatization of state owned enterprises (such as the textile mills, silos, etc.) is assumed to be financed elsewhere.

MAAHF Role and Responsibilities

The role and responsibilities of the MAAHF as it relates to assisting farmers in adding value to their products involve:

- convincing farmers what crop varieties should be grown that not only have a market, but that also provide the farmers with significant and consistent returns
- establishing an effective market information system that provides farmers and farmer associations with timely information on input and output prices and supplies
- assisting farmers supply the quality of products that are demanded by the processor and/or the end user
- helping farmers organize themselves to take advantage of primary processing opportunities and contract farming.
- linking farmers and farmers associations to processing, milling, and other value-added industries established within the region
- forming a national federation of farmers' associations that gives the farmers a greater voice in the role agriculture must play in the development of the country

The role and responsibilities of the MAAHF as it relates to assisting primary processors of agricultural (crop and livestock) products involve:

- training farmer associations and/or other rural organizations in primary processing (sorting, grading, storage, etc.) and marketing value-added products, in accessing finance and/or credit for value-added investments, in bookkeeping and business management skills, and in marketing and promotion
- assisting these and other organizations involved in primary processing in accessing quality products in appropriate volumes and appropriate and cost-effective processing equipment and machinery
- establishing an effective market information system that provides primary processors with timely information on input prices and supplies and primary product prices in other cities in Afghanistan and abroad
- assisting primary processors in getting their products graded and certified
- linking primary processors to secondary processors and/or markets, both domestic and international

- forming regional associations and a national association of primary processors (such as, grain warehousemen, cold storage operators, slaughterhouse operators)

The role and responsibilities of the MAAHF as it relates to assisting secondary processors of agricultural products involve:

- assisting secondary processors in accessing quality products from primary processors, including farmer associations
- providing timely information on primary product prices and supplies and secondary product prices in other cities of Afghanistan and abroad
- assisting secondary processors in establishing an effective HACCP program
- assisting secondary processors in getting their products certified
- assisting secondary processors in accessing markets, both domestic and international
- forming a national association of processors of a specific agricultural sub-sector (such as, millers, dairy processors)

The role and responsibilities of the MAAHF as it relates to assisting tertiary processors (bakers, processed food manufacturers, packagers, et.al.) of industrial food products involve:

- assisting tertiary processors in accessing quality products from secondary processors
- assisting tertiary processors in establishing an effective HACCP program and ISO standards
- assisting tertiary processors in getting their products certified
- assisting secondary processors in accessing markets, both domestic and international
- forming a national association of industrial food processors.
- Creating an enabling environment through policy, regulatory, and ministerial reforms
- develop transparent and effective procedures for a group of farmers and/or others to follow to become a legal association
- develop an effective seed certification system (accessible by farmers) throughout the country
- develop a national market information system that incorporates prices throughout the value chain and abroad
- establish appropriate policy and regulatory reforms that streamline the importation of machinery and equipment necessary for primary, secondary, and tertiary processing

- establish steering committee for assisting the formation of regional associations and/or federation of processors

BUDGET PROJECTIONS:

The role and responsibilities of the MAAHF as it relates to assisting farmers in adding value to their products

- Convincing farmers - See extension budget (research & extension Master Plan)
- Market information system – $4 million over 2 years, then a recurring annual $1 million for operating the system from village level to export information level for 3 years
- Training, TA, and helping make linkages – This requires specialized training, etc., therefore, need to set up a program that focuses on all links of the value chain - $5 million for 5 years
- Forming a national federation – requires Executive Management for two years and training workshops $1 million for 3 years then descending recurring cost of $200,000 per year for 3 years

The role and responsibilities of the MAAHF as it relates to assisting primary processors of agricultural (crop and livestock) products

- Training and TA to primary processors - $5 million over 5 years
- Market info system – see above
- Grading and certifying - $2.5 million over 5 years
- Linking to secondary processors and markets – see above
- Forming regional associations and national association – $1 million over 3 years with Exec Mgt funded, followed by descending recurring cost of $100,000 per year for 3 years

The role and responsibilities of the MAAHF as it relates to assisting secondary processors of agricultural products

- Training and TA to secondary processors - $1.5 million over 5 years,
- Market info – see above
- HACCP and certification - $3.5 million over 5 years
- Market access – see above
- Forming a national association – $200,000 funding executive management for two years followed by descending recurring cost of $100,000 per year for 3 years

The role and responsibilities of the MAAHF as it relates to assisting tertiary processors (bakers, processed food manufacturers, packagers, et.al.) of industrial food products

- Training and TA to tertiary processors - $1.5 million over 5 years
- HACCP, ISO, and certification program development – see above
- Market access – see above

- Form national association - – $500,000 funding executive management for two years followed by descending recurring cost of $100,000 per year for 3 years
- Creating an enabling environment through policy, regulatory, and ministerial reforms
- Develop procedures for legal association - $100,000
- Develop a national market information system that incorporates prices throughout the value chain and abroad – see above plus add equipment, subscriptions, etc. at MAAHF ($1 million over 5 years)
- Establish appropriate policy and regulatory reforms that streamline the importation of machinery and equipment necessary for primary, secondary, and tertiary processing and establish steering committee for assisting the formation of regional associations and/or federation of processors - $200,000 and $100,000 annual secretariat costs

Total Budget = $32 million

Item	2006	2007	2008	2009	2010
Market Info systems	**2.0**	**2.0**	**1.0**	**1.0**	**1.0**
Value Added training	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**
National Federation	**0.4**	**0.3**	**0.3**	**0.2**	**0.2**
TA primary processors	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**
Grading & Certification	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**
Regional associations	**0.4**	**0.3**	**0.3**	**0.1**	**0.1**
TA secondary processors	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**
HAACP and certification	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**
National association	**0.3**	**0.2**	**0.1**	**0.1**	**0.1**
TA tertiary processors	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**
National association	**0.3**	**0.2**	**0.1**	**0.1**	**0.1**
Legal association	**0.1**				
Market chain info system	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**
Regulatory reform	**0.3**	**0.1**	**0.1**	**0.1**	**0.1**

Financial support

Agribusiness development in Afghanistan will require significant credit resources. Foreign direct investment (FDI) should complement and supplement both public and private efforts. Properly targeted and attracted foreign direct investment will assist with the development of both physical (roads, power, finance availability, etc.) and social forms of capital (skills training, market

knowledge, etc.). In addition to the usually mentioned FDI benefits of more jobs, international training and associated higher wages, and a contribution to the tax base; other potential advantages to attracting the most desirable FDI partners would include:

- Infrastructure development, including roads, greenhouses, etc.
- Introduction of recent technology for harvesting, transporting, pest control, marketing, packaging, etc.
- Additional foreign pressure to improve regional trade
- "Crowding in" – the stimulation of growth in up/downstream industries,
- Providing access to foreign buyers

However, the Ministry of Agriculture's plan should include cross-ministry activities to target the most attractive agricultural sub-sectors for FDI and the most attractive investors for those sectors. One option is to develop a public-private partnership to prioritize the top five sub-sectors of Agriculture with screening criteria for overall financial and social impact on the Agricultural sector and the economy. A basic plan (with technical advisers to most likely initially offer guidance throughout the process). to support the sectors with FDI may include:

- Targeting 30 companies to approach for FDI
- Performing market research to identify international companies with areas of expertise in the prioritized sub-sectors.
- Contacting and screening the 30 firms to reduce the number to 12.
- Utilize marketing campaign and road show should describe and pitch the benefits of investing in Afghanistan's Agricultural sector.
- Leveraging embassies, the High Commission for Investment, the Commercial Competition Commission of Afghanistan and AISA to pitch to targeted companies.

Afghanistan should attract FDI from international companies that can (1) bring to bear technical expertise in a particular agricultural sub-sector, and (2) demonstrate a past history of being an investor that promotes social good, i.e. invests locally in cultural, human and knowledge capital. For instance, potential investors might be attracted for post-harvest projects such as additional raisin processing/washing plants. Other possible investment areas may include juice bottling/packaging plants, tomato paste plant or a jam/jelly plant. Finally, through partnering with firms with unique branding options, Afghan fruit and nuts might be packaged in unique nutrition bars or dried fruit and nut packs by firms such as Pepsico (Quaker Snack Bars) or General Mills (Nature Valley)..

The most likely investor to be found in Afghanistan seeks robust activities that offer their industry members many sustainable, shared competitive advantages. Such investors pursue innovation as a member of an industry cluster in order to maximize productivity, which usually has the most positive effects on prosperity and sustainable competitiveness. The investor is much more likely to produce value-added goods in-country while contributing to the higher forms of capital and helping to develop a brand name for the host country's products that can be internationally marketed and leveraged. An example of this investor is Tetra Pak of Switzerland. Tetra Pak supplies complete integrated processing, packaging and distribution lines as well as stand-alone equipment. The company believes "that a very close relationship between the food industry and its suppliers is the most profitable solution for all parties." "It means developing together and sharing our experience, knowledge and technology, as well as focusing on what consumers will need tomorrow."

Although foreign investment is a desirable goal, very little is expected in the next few years until security improves and the risk and uncertainty of losing ones investment are considerably diminished. Various incentives need to be provided to the private sector to encourage investment. Matching grants have been provided under the RAMP (USAID) and under the Afghanistan Agriculture Development Project (AADP) funded by USDA. Other projects also include an element of matching grants for the added value segment, for instance, the proposed EC seed project to start in 2006. It is intended that in the future, where funding makes it possible, that the matching grants for various private sector investments are coordinated by Private Sector Support Department of MAAHF. A project has been prepared for the capacity building in the Private Sector Department to enable it to carry out this role effectively in the future. The credit sources are explained in the Rural Financial Services chapter for the Master Plan. It is expected that of the $115.34 to $153.94 million investment required (with the exception of the activity entitled "marketing centers as part of association development of fruits and nuts"), approximately 25% will be made available as grant funds, 50% available through credit, and 25% from investor cash contribution. The feasibility studies and the funding for MAAHF will be funded from donors.

TOTAL BUDGET REQUIREMENTS

Feasibility Studies	$ 2.4 million
Expanded Value Added Activities	$115.34 to 153.94 million
MAAHF	$32 million
TOTAL	**$149.74 to 188.34 million**